



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/564,106	01/09/2006	Alex Zakonov	AVI-0003	7200
7590 07/29/2010				
Law Offices of Steven McHugh				
46 Washington Street				
Middletown, CT 06457				
EXAMINER				
PATEL, JIGAR P				
ART UNIT		PAPER NUMBER		
2114				
MAIL DATE		DELIVERY MODE		
07/20/2010		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/564,106

Applicant(s)

ZAKONOV ET AL.

Examiner

JIGAR PATEL

Art Unit

2114

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 4, 7-16, 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 4, 7-16, 18 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is in response to the filing on April 22, 2010. Claims 1, 2, 4, 7-16, 18, and 19 are pending and have been considered below. The applicant has canceled claims 3, 5, 6, 17, and 20.

Priority

2. Acknowledgement is made of applicant's priority of United States Provisional Patent Application Number 60/486,560 filed on July 11, 2003.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 4, 7-16, 18, and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Ritz et al. (US 7,263,632 B2).

As per claim 1: **A method for monitoring application exceptions generated by a software application, comprising:**

dynamically identifying an occurrence of an application exception generated by the software application prior to said application exception being logged

Ritz discloses [col. 06, lines 38-50] the monitoring service applies policy to filter which events are propagated up to invoke diagnostic module for root cause determination. Examples of such events may be desirable include enterprise environments where an IT manager or system administrator may prefer that the operating system not perform certain automatic root cause determination and/or problem resolutions actions automatically. Therefore, the operating system is capable of dynamically identifying root cause determination.

**collecting exception data responsive to said application exception;
examining said exception data, prior to said application exception being logged, to determine whether said application exception is a critical exception that will lead to a failure of said application and to identify critical exception data;
dynamically determining whether said critical exception is a primary exception or a derived exception, prior to said application exception being logged; and**

Ritz discloses [col. 05, lines 27-43] the event provider communicate events to a logger. Accordingly, any given event provider need not generate an event for every interaction it senses, but may generate only the more relevant events relating to root causes of problems [identifying critical exception]. For example, an event need not be generated every time a disk drive writes to a sector [non-critical event]. However, an event might be generated if the disk drive fails to respond to a read or write command [critical event]. The logger makes these determinations before the event has been logged to the event trace log file. Ritz further discloses [col. 09, lines 6-24] if the vendor is unable to determine the root cause, the vendor may use update service to

instruct diagnostic policy service to store additional event or state information to event trace log file [critical exception is a primary exception]. The resolution module may likewise instruct the logger to store additional events in order to ensure that proper resolution is achieved. When the additional information is transmitted to the error reporting service after the next occurrence of the problem [critical exception is a derived exception], the additional information may enable the vendor to better identify the root cause of the problem.

logging said critical exception data responsive to whether said critical exception event is said primary exception or derived exception.

Ritz further discloses [Abstract] the diagnostic module queries the log file to correlate events relevant to diagnosis of the problem, and identifies the root cause by evaluating the results of the query. Once the root cause of the problem is diagnosed, a resolution module corresponding to that root cause may be invoked to programmatically resolve the problem.

As per claim 2: **The method of Claim 1, wherein said operating includes operating said software application in at least one of a .NET framework and a J2EE framework** [Abstract; operating system (Windows)].

As per claim 4: **The method of Claim 1, further comprising processing said critical exception data responsive to at least one of said primary critical exception and said derived critical exception.**

Ritz discloses [Abstract] events are monitored within an operating system, and at least a subset of the events are logged to a log file. It is understood that a new event logged would be a primary critical exception. If a similar log exists, it would be a derived critical exception event.

As per claim 7: **The method of Claim 1, wherein said examining includes examining said critical exception data to determine if an exception chain exists.**

Ritz discloses [col. 06, lines 14-22] the diagnostics policy service determines when an actual problem has occurred by, for example, detecting a predetermined single error condition, or by detecting a predetermined sequence of error conditions has arisen [exception chain exists].

As per claim 8: **The method of Claim 4, wherein said processing further includes collecting critical exception data responsive to said critical exception and creating an exception information database.**

Ritz discloses [Abstract] events are monitored within an operating system, and at least a subset of the events are logged to a log file [information database].

As per claim 9: **The method of Claim 8, wherein said processing further includes creating a critical exception chain.**

Ritz discloses [col. 06, lines 14-22] the diagnostics policy service determines when an actual problem has occurred by, for example, detecting a predetermined single error condition, or by detecting a predetermined sequence of error conditions has arisen [exception chain exists]. Ritz further discloses [col. 06, lines 23-29] once a problem is detected, the computing system

performs a functional result-oriented step for programmatically diagnosing a problem evidenced by the one or more error conditions.

As per claim 10: **The method of Claim 7, wherein said processing further includes associating said collected critical exception data with said critical exception chain.**

Ritz discloses [col. 06, lines 14-22] the diagnostics policy service determines when an actual problem has occurred by, for example, detecting a predetermined single error condition, or by detecting a predetermined sequence of error conditions has arisen [exception chain exists]. Ritz further discloses [col. 06, lines 23-29] once a problem is detected, the computing system performs a functional result-oriented step for programmatically diagnosing a problem evidenced by the one or more error conditions.

As per claim 11: **The method of Claim 1, wherein said processing further includes comparing said critical exception data with data contained within an exception information database to determine whether said exception is said critical exception [col. 07, lines 32-63].**

As per claim 12: **The method of Claim 1, wherein said examining further includes labeling said exception as at least one of a critical exception, a non-critical exception, a derived exception and a primary exception.**

Ritz discloses [col. 07, lines 46-63] if the query results are associate with an identified root cause, the invoked diagnostics module may invoke an appropriate resolution module to perform an identified resolution that corresponds to the identified root cause. The identified root cause

for a problem is some problem that is known to exist [derived exception event]. It is understood that if a problem is not known to exist, it would be a primary exception event.

Ritz further discloses [col. 09, lines 6-9] if the error event does not have a known root cause associated with it [critical exception], diagnostics module will report this information to the activity log, which in turn sends an error report to error reporting service. It is understood that if the error even does have a known root cause, it can be fixed with predetermined instructions to follow [non-critical exception].

As per claim 13: **The method of Claim 12, wherein said processing further includes updating said exception information database with said exception data** [col. 08, lines 53-60].

As per claims 14-16 and 18: Although claims 14-16 and 18 are directed towards a system claim, they are rejected under the same rationale as the method claims 1, 3, 2, and 4, respectively.

As per claim 19: Although claim 19 is directed towards a machine-readable medium claim, it is rejected under the same rationale as the method claim 1.

Response to Arguments

5. Applicant's arguments filed on September 14, 2009 have been fully considered but they are not persuasive. In response to applicant's argument that Ritz is not capable of dynamically determining the occurrence of or responding to an exception event, the examiner respectfully disagrees. Ritz discloses [col. 09, lines 6-24] if the vendor is unable to determine the root cause,

the vendor may use update service to instruct diagnostic policy service to store additional event or state information to event trace log file. The resolution module may likewise instruct the logger to store additional events in order to ensure that proper resolution is achieved. When the additional information is transmitted to the error reporting service after the next occurrence of the problem, the additional information may enable the vendor to better identify the root cause of the problem. Since the root cause was not determined, it is clear that the event was not propagated to invoke diagnostic module. Therefore, Ritz is capable of dynamically determining the occurrence of an exception event without propagating to invoke diagnostic module.

6. In response to applicant's argument that Ritz does not determine the type of critical exception and process the critical exception responsive to the type of critical exception, the examiner respectfully disagrees. Ritz discloses [col. 09, lines 6-24] if the vendor is unable to determine the root cause, the vendor may use update service to instruct diagnostic policy service to store additional event or state information to event trace log file. The resolution module may likewise instruct the logger to store additional events in order to ensure that proper resolution is achieved. When the additional information is transmitted to the error reporting service after the next occurrence of the problem, the additional information may enable the vendor to better identify the root cause of the problem. Therefore, it is clear that primary exceptions store more information while trying to find a root cause. The derived exceptions would not need to store further information because the root cause of the problem is already known.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JIGAR PATEL whose telephone number is (571)270-5067. The examiner can normally be reached on Mon-Fri 10:00AM-6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Baderman can be reached on 571-272-3644. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott T Baderman/
Supervisory Patent Examiner, Art Unit 2114

/Jigar Patel/
Examiner, Art Unit 2114